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AN ACTION PLAN TO STRENGTHEN LINKAGES BETWEEN AGRICULTURAL PRODUCTIVITY GROWTH AND IMPROVED CHILDHOOD NUTRITION¹

by

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BACKGROUND: Over the last fifteen years, Mali's agricultural sector has grown at an annual rate of 3.9%. Since the devaluation of the CFA franc in 1994, the cotton and rice sectors have expanded even faster, growing at rates of more than 9%.

Despite these positive trends, recent nutrition surveys suggest alarming levels of childhood malnutrition. According to the 1995/96 DHS study, 30% of Malian children aged 0-35 months are chronically malnourished, 23% suffer from acute malnutrition, and 40% are underweight. These findings show that Mali ranks poorest in

childhood nutritional status among the 20 Sub-Saharan countries for which comparable studies are available. Childhood malnutrition rates do not significantly differ from region to region or from urban areas to rural zones. Other data sources from the previous 10 years show similar or increasing rates that suggest childhood malnutrition is a chronic, long-term problem.

The paradox of seemingly persistent malnutrition in the face of strong agricultural growth raises the question of what actions are needed to reinforce the benefits of agricultural-led growth to improved nutrition, and what the

¹ This project is being coordinated jointly by Michigan State University, the Institut du Sahel (INSAH/CILSS), and the Division Suivi de la Situation Alimentaire et Nutritionnelle (DSSAN) of the Cellule de Planification et de Statistique (CPS) in the Ministère de la Santé, des Personnes Agées et de la Solidarité (MSPAS). Other collaborators include the Institut d'Economie Rurale (IER), the Direction Nationale de la Statistique et de l'Informatique (DNSI), and the Compagnie Malienne pour le Développement des Textiles (CMDT). Financing is provided by USAID/Mali through the Food Security II Cooperative Agreement managed by USAID's Global Bureau (G/EGAD/AFS).



relationship is between increased agricultural production and improved food security, as measured in terms of nutritional status of children under three years old.

OBJECTIVES AND METHODS: USAID/Mali, as part of its strategic objectives to improve the welfare of Malian youth and consequently the productive capacity of the Malian agricultural economy, is launching a research/outreach project that seeks to support current efforts of the Government of the Republic of Mali (GRM) to reduce child malnutrition. The Food Security II Cooperative Agreement at Michigan State University (MSU), in collaboration with the recently created Food and Nutrition Monitoring Division (Division Suivi de la Situation Alimentaire et Nutritionnelle - DSSAN) of the Planning and Statistics Unit (CPS) of the Ministry of Health (MSPAS), and the Institut du Sahel (INSAH), will coordinate the project's research and outreach activities.

This policy brief is the first in a series of bulletins to be published throughout the project to disseminate key project findings and recommendations. This first synthesis describes the project objectives and calendar of activities.

The primary aim of the project is:

- to establish how basic factors affecting childhood malnutrition rates have changed over the past 10 years, and
- to identify causal relationships and suggest policies to increase the positive effects and reduce the negative effects of agricultural-led

income growth to reduce childhood malnutrition.

The proposed research/outreach will take place in two phases:

- an exploratory/hypothesis-generating phase, and
- an in-depth research/action phase.

ACTIVITIES:

Phase I: Exploratory Research

The first phase of the research will consist of several steps and will be done collaboratively by MSU campus- and INSAH-based staff and researchers from several Malian ministries and the Institut du Sahel.

- First, it will review what is currently known about agriculture-nutrition relationships in Mali and throughout the world, with particular emphasis on West Africa.
- Second, analysts will generate hypotheses about the paradox of agricultural production growth and child protein-calorie malnutrition and examine data sets in Mali that will allow testing these hypotheses to disentangle nutrition-agricultural production relationships. This examination of the data sets will identify what variables are available in each set and how they might be used to test hypotheses about nutrition-agricultural production relationships. Such testing will



be carried out in the second phase of the project.

- Finally, the first phase work will propose strategies to carry out these tests and to monitor these relationships and the nutritional situation on an ongoing basis. Analysts will identify plans under way in Mali to develop ongoing monitoring of agricultural production and nutritional status to make suggestions on how these monitoring activities might be designed to overlap to yield greater insights into their linkages.

The result of the first phase of the research will be a report, which will lay out what is known about agricultural production-childhood malnutrition linkages in Mali, what the knowledge gaps are, and a strategy of applied research and outreach to fill the gaps. The report will also discuss, how, on the basis of the findings either from the preliminary or the more in-depth research of the second phase, action programs can be designed to strengthen the positive effects of agricultural-led income on child nutritional status.

First phase results will be presented at a national workshop in Bamako early in 2000 and will serve as the basis for developing a research and action plan for the second phase of the project.

Phase II: In-Depth Research and Action Plan

Phase II will involve developing and carrying out the plans for in-depth research to test the key hypotheses, writing reports and outreach materials to present the results to key policy makers, and on the basis of the findings, possibly developing action plans for programs to improve the

nutritional payoff of agricultural-led income growth. We anticipate that Phase II will last 18 months.

It is likely that the Phase II in-depth work will involve at least some household-level research. It would be preferable if it could be integrated with an ongoing or planned survey at the DNSI, IER, CMDT or Ministry of Health (e.g., adding an anthropometric component to an ongoing farm production/marketing survey; adding agriculture-related questions to a budget-consumption-anthropometric survey or to the planned World Bank-financed micro-nutrient survey). Yet until the results of the first phase are known, it is premature to specify a detailed research design. It is also possible, based on the Phase I report and preliminary Phase II results, that specific action plans to improve nutritional status can be developed.

The overall anticipated output will be improved understanding of agricultural production-nutrition relationships in Mali, which will permit the design of more effective nutrition-interventions and agricultural productivity programs. Phase II outputs will include a report detailing the relationships between growth in agricultural production and nutrition as well as identifying strategies to improve the effects of agricultural-led growth on childhood nutrition. These could include, for example, plans for self-taxation at the commune level of farmers' agricultural incomes to finance improved health and water facilities and nutrition education programs. Key findings will be disseminated in policy syntheses and in meetings throughout the project with Malian and donor policy



makers to obtain feedback on directions for future work.

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